CULTURE

OF

THE STRAWBERRY,

AS PRACTISED BY THE AUTHOR;

SHEWING HOW TO OBTAIN EARLY AND LARGE CROPS, OFF A SMALL PIECE OF GROUND.

BY JAMES CUTHILL,

CAMBERWELL, LONDON,

Author of "A Treatise on the Potato, &c.;" "Market Gardening Round London;" "The Better Management of the Vine;" and "The Cultivation of the Mushroom."

LONDON:

SOLD BY THE AUTHOR;

HAMILTON, ADAMS, AND CO., PATERNOSTER ROW; AND AT "THE FLORIST" OFFICE, HENRIETTA STREET,

COVENT GARDEN.

1860.

PRICE ONE SHILLING.



634.7



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STRAWBERRY CULTURE.

STRAWBERRY growing has rapidly increased during the last ten years. It is scarcely a quarter of a century ago, that the author of this, when found by his employer watering forced strawberries, with a strong manure water, was threatened with dismissal, if he used any more of that nasty fluid for his strawberries! This same employer, only about three years ago, remarked how vastly things had altered; adding, that he much approved of liquid manure, and that the author's case was not to be compared with that of the old Dutch gardener, who came over to England in Queen Anne's time, and settled on the Grosvenor estate, between Vauxhall and Chelsea. The Dutchman knew that, unless the refuse from the ground was again put back, the crops must fail for want of nourishment. An action-at-law was commenced against him; but the landlord forgave him, provided he would not again poison the land with his filthy stuff!

The strawberry, up to the time of the Dutch gardener's

arrival in England, was called woodberry. One year a very heavy hailstorm came over London, and spoiled all the woodberries with grit and mould; next year the gardeners laid straw under them, and, from that time, they have been called strawberries.

This most delicious and wholesome fruit is very largely cultivated for the London markets, and more fruit is even consumed in the villages surrounding the metropolis than in the largest provincial town in England. It is indeed difficult to discover the correct acreage devoted to the growth of this delightful fruit, in the suburbs of London, but it may be fairly estimated to be about three hundred acres.*

In the cultivation of the strawberry I have tried every plan that my experience suggested, up to the present time.

The ground should first be trenched three or four spades deep, and then be trodden down very firmly again, and a very heavy covering of horse-manure put on—barrowful touching barrowful, which is then to be dug in, and the ground again trodden down very hard; so much so that one Irishman, some dozen years ago, said to another, "What is the use of trenching the ground, when master will have it made as hard as it was before?"

^{*} Vide "Market Gardening Round London."

I am much in favour of keeping the manure near the surface; so much so, that I have been trying the plan just ten years, upon a border about two hundred feet long. This Black Prince border has not been forked or dug, but plenty of half-rotten manure put on every February. The crop of strawberries off it every year, is large and early. The first strawberries have generally been ripe from the 25th to the 28th of May, for several years past; when I have begun selling them at one shilling an ounce; and have sold them in Covent Garden at five shillings per pound. I merely mention this to show that by this treatment the border does not go back, as one would naturally suppose.

Another border that was planted when I first rose my Prince of Wales, in 1849, has not been touched, till this Autumn, 1859. The Princess Royal has also been subject to the same culture for five years.

It must be borne in mind that my ground is very light, and, therefore, the more compact it is made the better the strawberry thrives; still, it is necessary to dig in, after trenching, a fair proportion of stable manure, for the young plants to root into; but after they are established, the manuring on the surface is best for many reasons, not only for the strawberry, but for other crops also. This is the reason, that in any light chalky,

or light sandy soils, why they do not bear, if the soil before planting is not trodden down very hard, also trodden round the plants after they are planted. Let it be remembered, I am not speaking of a strong clayey soil, for in that case the less treading the better. Rain and watering will make this soil firm enough.

To prepare the runners and get them strong, as early as possible, for sending out as soon as the fruits of the various sorts are all gathered, the ground between the beds is cleared of weeds, and as soon as the runners meet and become numerous, I scatter mould over them, not being very particular about covering the shoots, as they soon push themselves through again. The great advantage of this very simple process is, that the runners strike root at once; and, in a short time, my plants are firmly rooted, which hundreds of gardeners, in all parts of the country, well know.

In taking up the runners for my own planting, I am not particular whether they are first, second, or third, on the same runner, so long as they have good roots, they all bear the next year. This plan, I admit, would not do for Queens, &c.

I have used no other than stable manure for twenty years upon my ground, with the exception of salt and soot, when I grew ash-leaved potatoes. I may, however, be wrong in thinking that this sweet manure imparts a better flavour, not only to the strawberry, but to most other fruits.

Having met with so many disappointments with Keen's, even with the greatest care, I have made it one of my fundamental principles, to propagate from the Black Prince, with, at all times, a mixture of the Queen with the others. The result of this is that, with every succeeding seedling, which I have retained, they are, to say the least, enormous bearers, with a certainty of a heavy crop every year.* But, say some fruit judges, there is no Queen flavour, for instance, in your Prince of Wales, none also in the Princess Royal of England. It possesses a sort of pine-apple flavour.

In April, last year, my longest border, which had been trenched four spits deep during the winter, and well surface manured, (being slightly dug in,) was planted with equal proportions of my three sorts (about two thousand plants). They were carefully taken up, so as not to injure the roots, and planted upon the box-edging

^{*} Mr. John Wormald, of Yorkshire, says, "The strawberries you sent me have done well; but there is one sort I like much better than the rest—I do not know its name—but I believe I could grasp fifty or more, all ripe, on one single plant. I never saw such a bearer." This is my Prince of Wales.

system, with the roots carefully spread out along the line, and filled in with the hands, made firm with the feet, and once watered. They produced as fine a crop as ever I had from autumn planting. I merely mention this to show what my sorts are capable of doing when they are well treated.

In dressing the runners for planting out, I have discovered, that in pruning the plant attached to the runner, the end nearest to the mother, or old plant, ought not to be too closely pruned. I have generally cut it off one inch from the plant. Such close pruning as this causes disease, should the weather continue wet; for the runners so closely pruned cannot perform their wonted functions: neither can they if too much water be given to them. In either case, the end, if cut off close, is, of course, inserted in the soil; the moisture gradually, but not immediately, finds its way up the vessels of the runner, or the now independent plant; for it must be borne in mind that the runner still forms the nucleus of a new plant, and if the damp or disease still goes onward till it arrives at the core of the plant, then death must follow. And to prove this, let a sickly plant be taken up—say a month or more after planting it will be observed in all cases that this part, where the runner was cut off, forms a hollow tube, and if the centre

of the plant be cut through, the cause of disease, will at once be apparent. To avoid this the runners ought to be cut long enough, so that the cut end should be out of the soil when planted.

In order to prove what I have said, take up a healthy plant: it will be seen that the end where cut off is green and has not rotted away.

I have not found any wireworm in the diseased tubes leading to the centre of the plant.

Those plants sent to the country, by myself and others, are less liable to the disease, on account of the runners having been pruned some time before they are planted: they get more dry and healed over, (like the cutting of a scarlet geranium skinned over,) which ought always to be made several hours before pricking out.* I have never observed any disease in runners, when they were allowed to run, and root naturally, and form their own plantations from the parent plant between the old rows.

Plants that have been long established and are still attached to the mother plant, the string or internode, between the young plants, gets more hard and firm, the

I never cut the leaves, nor yet the roots, nor at any time cut off or remove the dead leaves.

pith or string is less liable to rot, especially in the case of late planting out.

Now for planting out. The rows are two feet six inches apart. The first row will explain all the rest. It is cut out by the spade, as if for box-edging. A little loam or clay is scattered along the line the plants are to be placed, with the roots stretching out lengthwise, combed out if you like, with the crown rather above the surface, so that when the row is filled in with the hand and trodden with the feet and then watered, the crown of each plant will be level with the surface. (Remember that a forest tree may be killed by deep planting.) The second row is about eight inches from the first, or a third or fourth, as the case may be. This is my practice, as I want a large crop off a small plot of ground, the first year. These may be called beds. Measure again two feet six inches from the last row, to form the second bed, and so on.

This plan gives the numerous roots available food at once; while, on the other hand, the dibber crushes the roots all into a hole, glazing or hardening the sides of the hole, so that it takes a long time for the plant to recover itself, besides injuring the roots. A dibber is only fit for plants fresh forming roots, what is called pricking out; neither am I so particular to plant so very young, as the

plants are growing fast; but I am very particular in having everything ready when a good opportunity offers itself, such as a dull, rainy day, &c.

The second year, if I do not require the plants for the country, the alleys or fallow ground between the beds are covered with runners: those are upon fresh ground, and being young plants, bear a large crop of fruit the next summer. The runners plant themselves.

Some may say that a fruit is not so good when closely grown. That is a mistake, at least with my sorts. All fruit depends upon the leaves for the flavour of the fruit.

I have a melon prize medal in my house, from the Horticultural Society of London, obtained some twenty-three years ago: the fruit was covered with sand for a month before it was ripe, and the sun entirely excluded from it.*

Leaves are the lungs of plants, and on them their health depends, the quantity and goodness of the fruit, even down to the fruit of the earth—the potato.

For strawberry plants, when established, spring is the proper time for manuring and mulching. This is making the surface rich when the plants most want it. And this is a most particular point. The horse-manure is prepared

^{*} Vide Loudon's Magazine for 1837.

by turning and rotting the straw until it is about halfdecayed. And any time during February, or early in March, about London, (in the north, April would do) the manure is scattered on by the hands, or otherwise, being very particular to spread it evenly all over plants and alleys to the thickness of, between two and three inches. This manure or mulching becomes by exposure quite sweet; and, by means of dews and rain, is continually parting with its riches to the plants when they most want assistance. The mulching, long before the fruit gets ripe, has assumed a dark colour; and instead of being a reflector, as clean white straw is, it absorbs the sun's heat, retains it, and makes the fruit ripen at least a week earlier than it otherwise would do. I have now practised the plan of mulching with fresh manure from the stable these twenty years; but formerly I put it under and around the plants when they were in or coming into flower. And this plan took much time, and did not realize half the advantages of that recorded above. Until lately, we gardeners have been afraid to mention manure, either in a solid or liquid state; just as if the earth, as if by magic, could produce its riches continually without being fed. Prejudices such as these are, however, fast giving place to common sense and sound reason.*

^{*} Vide The Gardener's Chronicle.

Thanks to Alderman Mechi, and others; this manure question has now been freely ventilated. Were I to tell a farmer, that the time will come, and is not far distant, when surface manuring will be carried out on the farm as well as in the garden, his answer would be, "Impossible." The word impossible will, however, no longer, do for one who has lived twenty years upon a plain acre, at now, forty pounds a year—a great rent. Were I to tell him further, that by a proper application of surfacemanuring, he might save his turnip crop from black fly, his answer would again be, "Impossible." He would also say, "I have been told that something has been said by a clever Scotch-American about surface-manuring." Why did not our Transatlantic friend frankly acknowledge that he took the idea out of Cuthill's pamphlets?

I may here warn people, however, that if the plants are manured after the crop is gathered, the result will be an immense crop of foliage, and a late growth with the buds not ripened before the frost sets in, and there will be less blossom next year.

Autumn manuring, or mulching strawberries, I consider to be an evil, and for this reason: that after a long dry summer and autumn the ground has had a rest, and the riches of the earth have increased by dews, with occasional showers. When, therefore, rain does set in,

nutrition is sometimes more than sufficient; so much so, that strong growing sorts such as Keens and Queens grow so strong, and so late, that their centres have not time to ripen the buds.

I have applied liquid manure during the winter, (at this time the plants are at rest,) and it cannot do any harm to any fruit-bearing plant; but, on the contrary, it enriches the soil, and lies latent until wanted.

The last year's beds are cut away with the spade in the autumn, or pulled up by the hand. This plan gives a rest to the soil, alternately. But where I have so many young plants to send off every year, I cannot always do so, and the old beds then last for years. But when it can be done every alternate year, this plan is the best with my sorts; but it would not answer with strong growing kinds, unless in a very stiff soil.

By my bed system I get the largest crop from the smallest piece of ground: so much so that those who have been here from all parts of the country have been quite astonished. Should the season be very dry, the plants are more easily watered. Should it be wet, the season is prolonged, and then the only difficulty is, that some of the fruit damps off through the exuberance of the foliage.

I may mention that soot is a fine manure for the strawberry. When I forced this plant to the number of

thousands yearly, I always put in the pot a handful of pure soot: this not only prevented worms from entering the hole at the bottom, but the roots were also nourished by it.

The pot cultivation of early strawberries cannot well be done without, although this plan, with such an easy and simple plant to manage, is far from being the best.

I am one who thinks that a vinery or a peach house ought to be almost entirely by itself at the present time, as glass and hot-water pipes are so reasonable, and low pits being far the best for so dwarf-growing a plant; and so much more suitable, that this plant ought to have a place in the glass erections to itself. I tried this plan, the results of which any one can see if he turns to Loudon's Magazine for 1837. This plan was by taking up from the open ground bedding-out plants, with balls of earth entire, and planting them into pits that had been filled with hot dung and mould.

This plan I have practised ever since. And since I have been here, I have taken into Covent Garden many hundred ounces. The greatest was seven hundred in one morning.

The red spider is almost unknown in a pit; while in a house it can hardly be kept under. The philosophy of

forcing, I shall leave Dr. Lindley to explain as follows; the truisms he furnishes every grower ought carefully to study.

"Those who would understand the philosophy of strawberry forcing should begin at the beginning, and first determine what it is they have to deal with. This can only be ascertained by examining the young flowerbuds as they exist in the plant when it makes its first move towards growth. At that time they are collections of tiny scales placed over a small spongy centre. By degrees they take on the forms of calyx, corolla, stamens, and pistil. They form successively in the order in which they are named, the calyx first, the pistil last. The calyx and corolla are the most simple, grow the quickest, and most easily bear to be hastened: stamens require more time for growth, the pistil most of all. When high temperature, night and day, with abundance of moisture, and as much light as February yields, are suddenly applied to the strawberry, it is compelled to grow; the predetermined parts advance, and obedient to the influences which their nature cannot disregard, they by degrees unfold: but how? The oldest parts, namely, the calyx and corolla, simple in structure, and already advanced in their formation, suffer no injury, but appear in their usual state, arraying the blossom in gay apparel of white and green. The next, however, the stamens, having less time to form, acquire perhaps their yellow colour, but are powerless for their allotted office; while the pistil, the most complicated of all the parts, that which demands the longest period for its perfect formation, but which is the latest that the flower produces, and which is to become the fruit, is a mere tuft of abortions, incapable of quickening, and shrivelling into pitch-black threads as soon as it is fully in contact with the air."

WATERING.

This appears to be done by many in the evening, after the plants are allowed to be thoroughly exhausted. This I cannot understand: why should we allow the plants almost to die, when it might be done in the morning after picking? Here, again, my bed-system answers well for watering in the hottest sun. In my case, I have seldom any need of watering, on account of the depth of mould and the heavy mulching: and if watering can be avoided, so much the better.

Ground that has been planted four or five years only, will stand dry weather best; for instance, my early bor-

der, that has not been trenched or dug these ten years, requires more water. This is easily accounted for; viz., the more solid the under soil, the less influence has the heat of the sun to draw up moisture from below.

GATHERING.

There are many fruits besides the strawberry condemned by gathering before they are ripe and fit for the table; but strawberries, above all other fruits, are picked but too often, just anyhow. An old lady, when my Black Prince first came out, took the trouble to send me some by post, and said, "If this is your Black Prince, the gardener tells me they were not worth growing." Those she sent would not have been ripe for a fort-This sort, as well as my Prince of Wales, night. will hang until they are quite sugary. Neither the one nor the other, nor any other sort ought to be gathered till there is a rich gloss or saccharine appearance on the skin of the fruit, with a rich perfume. That will be several days after strawberries are generally picked, and it is astonishing how long a strawberry will keep if gathered in early morn; but if gathered in the afternoon, when the leaves and the fruit have perspired, and the whole plant is exhausted, in less than twenty-four hours they grow mouldy.

To judge a new strawberry is very difficult. There are but few palates alike. In my case, so close upon London, only three miles south of the Thames, and on the high road to the Crystal Palace, anyone can call and see, and taste, as well as see the habits of the plants, the treatment, soil, and everything.

My Prince of Wales has given great satisfaction to Dr. Lindley, he having grown it for several years, his gardener told me, when I called, that my three sorts up to the present time surpassed all others for being very early and very late. The kind just named is not only early but the latest, on account of the numerous trusses continually coming up.

I have had a row of Elton for three years, side by side: the Elton is done three weeks before the Prince of Wales; besides, with the exception of the Black Prince, it is the finest preserver, and it is preferred by many on account of its preserving whole, retaining its bright scarlet colour. This strawberry might be made much later, by planting it in cold northern aspects.

The following letter of Mr. Hillhouse speaks of the crop off a very small bit of ground, of this sort of strawberry, the Prince of Wales, gathered from three o'clock in the morning, and sent off by eight o'clock, viz., one hundred pound-baskets, gathered by two gatherers only, myself making them up:—

Sir,

I have pleasure in stating, that the strawberries you supplied for our late anniversary, at Wanstead, were in every respect very satisfactory.

I am, Sir, yours, &c.,

CHARLES HILLHOUSE.

My Princess Royal of England, if kept in the pots after forcing, and starved for a few weeks, and then planted out, ball entire, will bear a fair crop of fruit in the autumn, as well as a first-rate crop the next year. They were treated as above at Mr. Scorer's, of Champion Hill, Camberwell, and they produced very good fruit; but, what with sparrows and slugs, they suffered much, but a little attention is necessary. All strawberries will fruit, more or less, treated as above; but, as we cannot rise so late a sort as is required, it is just possible that this one might be a sure autumn-bearer. Mr. Scorer's

gardener took a prize with a dish of them, amongst other things, at a fruit show, on the 20th of September, 1859.

I have avoided a general list of sorts. A grower, even if he had half that is put into those long lists, would neither be just to himself nor the public to give an opinion; as so much depends upon culture, climate, locality, and soil, that those mushroom upstarts ought to try and refrain from giving their opinions. They surely do not possess the palates of every body; neither do they know, neither can they know, the various ways of cultivation. Let it be understood that I am not referring to the Pomological or Horticultural Societies.

I have had, at least thirty years' practice, and I confess that I am but a learner still; neither shall I ever give my opinion, either in praising or condemning, right and left, as I see some do. The public are my judges, and they are the best.

Highland Mary and Richard the Second will be sent out this autumn. They have both been highly spoken of in the *Gardeners' Chronicle*, and approved of by those visitors, who daily call here, during the fruit season.

Mr. A. Henderson, Pine Apple Place, writes: "I received the two sorts of strawberries in good condition.

The Improved Black Prince, or Richard the Second, is particularly fine; being twice the size of the old sort, fruit large, round, and heavy, of an excellent colour, with brisk, high flavour. Highland Mary is more tapering, after the shape of the British Queen, but fruit more regular, and of a more beautiful shape, of a good size, with a very sweet and rich flavour. The Improved Black Prince will be most valuable for preserving, the flavour being so brisk and sharp."

All I can state is, that they are both quite distinct from each other, as well as their parents. They stand forcing well. They have been some years under severe test. This summer makes the fifth.

Any one living far off, and who has a desire to see the fruit of any of my sorts, can have them sent by post, by inclosing stamps to pay the postage.

NEWTON SEEDLING.

This is one raised by a Clergyman, and he made me a present of one hundred plants. The plants look very distinct, very dwarf foliage, red in stalk and runner like its parent Black Prince. The fruit that the reverend gentleman brought me were large, well-shaped, and splendid fruit, with good flavour. I have not yet fruited the plants, but they promise well.

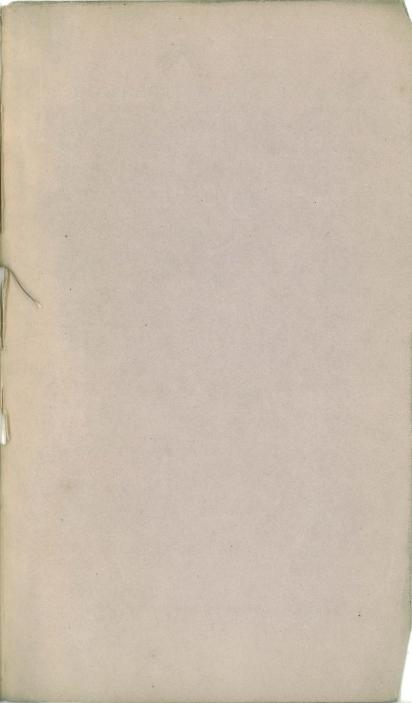
I have no artificial drainage, besides deep trenching, and the first inventors of drainage, the worms.

Having now, though very briefly, shown what is necessary to be done in strawberry cultivation, and also how to do it, I leave these remarks for the public to determine their value.

BIRDS.

Among these I am only troubled by the London sparrow, whose destruction I effect as follows:—The annoyance experienced from sparrows eating up valuable things in all gardens round large towns is every year getting worse. I used to buy the powder of the nut or berry of Nux Vomica, but finding this ineffectual I procured the nut entire at the chemist's. Two ounces of it should be stewed gently in a pint of water for 12 hours. Pour this liquid off and save it; then cut the nuts very small (as by this time they will be very soft); again but

the nuts in to stew with an addition of half a pint of water; stew gently for six hours, then add the former liquid to this and half a pint of wheat; keep it at a gentle heat until the Wheat absorbs all the liquid. Two grains thus pickled will kill a sparrow in a frosty morning at once, and it is a very humane way of effecting that object. Sparrows do not eat much of the fruit of the strawberry. They only pick and taste, damaging the sale of the fruit. Only sparrows and chaffinches eat wheat, singing birds will not touch it.



CUTHILL'S STRAWBERRY PLANT.

1860.

Cuthill's Early Black Prince, 5s. selected 7s. 6d. per 100. Cuthill's Princess Royal of England, good size, fine colour, pine apple flavour, great bearer, very hardy, good forcer, per 100, 7s. 6d. selected, 10s.

Cuthill's Prince of Wales, good size, rich colour, cone shape, tremendous bearer, first rate for table and preserving, it is earlier and later than Elton on account of its numerous

trusses, 7s. 6d. per 100, selected, 10s.

My Highland Mary, and my improved Black Prince, or Richard the 2nd, cannot be sent out till the autumn of 1860. Mr. A. Henderson, Pine Apple Place, writes, "I received the two sorts of Strawberries in good condition, the Improved Black Prince, or Richard 2nd, is particularly fine, being twice the size of the old sort, fruit large, round, and heavy, of an excellent color, with brisk high flavour: Highland Mary is more tapering, after the shape of the British Queen, but fruit more regular and of a more beautiful shape, of a good size, with a very sweet and rich flavour. The Improved Black Prince will be most valuable for preserving, the flavour being so brisk and sharp. Dr. Lindley told me himself, that he never could depeny upon having a Strawberry until he had my breed.

Best Mushroom Spawn.

Cuthill's Black Spine Cucumber, 1s. per packet. Cuthill's Long White do. do. do.

Cuthill's Highland Mary, or Winter Cucumber, 1s. packet. This is either for Summer or Winter, one of the smooth and very handsome ones 10 to 12 inches. 1 e above were the best at the Horticultural Society in 1557

Melons. Cuthill's Camberwell Beauty, green flesh, 2s. per packet. Other good kinds, 1s.

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Cuthill's Pamphlet on the Potato, with 20 more articles, on the Strawberry, Asparagus, Sea Kale, &c. 2s.

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